

REMARKS

I. Introduction

Claims 1 to 4, 11 and 14 to 17 are pending in the present application. In view of the foregoing Amendments and the following remarks, it is respectfully submitted that all of the presently pending claims are allowable, and reconsideration is respectfully requested.

II. Rejection of Claims 14 and 16 Under 35 U.S.C. § 102(b)

Claims 14 and 16 have been rejected under 35 U.S.C. § 102(b) as anticipated by U.S. Patent No. 4,717,207 ("Kubota et al."). Applicant respectfully submits that Kubota et al. do not anticipate the present claims for the following reasons.

Claim 14 relates to a method for controlling a wheel brake of a vehicle. Claim 14 recites that the method includes determining a road slope and determining whether at least one of a brake pedal is depressed and a parking brake is engaged. Claim 14 further recites that the method includes maintaining a braking force at a wheel independently of an extent of a brake pedal actuation, in at least one operating state with one of the brake pedal depressed and the parking brake engaged, if the road slope points in a direction of a future travel direction of a vehicle. Claim 14 also recites that the method includes reducing the braking force for at least one condition.

Claim 16 relates to a storage medium for storing at least one computer program, wherein the at least one stored computer program is operable for executing in a computing unit a method for controlling a wheel brake of a vehicle. Claim 16 recites that the method includes determining a road slope and determining whether at least one of a brake pedal is depressed and a parking brake is engaged. Claim 16 further recites that the method includes maintaining a braking force at a wheel independently of an extent of a brake pedal actuation, in at least one operating state with one of the brake pedal depressed and the parking brake engaged, if the road slope points in a direction of a future travel direction of the vehicle, and reducing the braking force for at least one condition.

Kubota et al. purport to relate to a booster unit for moving a vehicle on a slope in a method of controlling the same. Kubota et al. state that an energization signal is produced if it is determined that a vehicle is in a stopped condition on a

slope. Column 6, lines 62 to 64. The stopped condition determination, however, does not correspond to a brake pedal being depressed or a parking brake being engaged. For example, as the Final Office Action admits at page 4, Kubota et al. fail to disclose determining whether a brake pedal is depressed. Therefore, the energization signal bears no relationship to the status of the brake pedal under the disclosure of Kubota et al. The Final Office Action therefore apparently bases the instant rejection on the alleged disclosure by Kubota et al. of a parking brake determination. Applicant points out, however, that Kubota et al. produce the energization signal only if it is determined that the parking brake is off. Column 10, lines 38 to 40 and Fig. 10, step 104. Thus, Kubota et al. do not disclose, or even suggest, "maintaining a braking force at a wheel independently of an extent of a brake pedal actuation, in at least one operating state with one of the brake pedal depressed and the parking brake engaged" as recited in claims 14 and 16.

To anticipate a claim, each and every element as set forth in the claim must be found in a single prior art reference. Verdegaal Bros. v. Union Oil Co. of Calif., 814 F.2d 628, 631, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987). Furthermore, "[t]he identical invention must be shown in as complete detail as is contained in the . . . claim." Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989). That is, the prior art must describe the elements arranged as required by the claims. In re Bond, 910 F.2d 831, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990). As more fully set forth above, it is respectfully submitted that Kubota et al. do not disclose, or even suggest, "maintaining a braking force at a wheel independently of an extent of a brake pedal actuation, in at least one operating state with one of the brake pedal depressed and the parking brake engaged" as recited in claim 14 and claim 16. It is therefore respectfully submitted that Kubota et al. do not anticipate claim 14 and claim 16. Withdrawal of the present rejection is therefore respectfully requested.

III. Rejection of Claims 1 to 4, 11, 15 and 17 Under 35 U.S.C. § 103(a)

Claims 1-4, 11, 15 and 17 have been rejected under 35 U.S.C. § 103(a) as unpatentable over the combination of Kubota et al. and U.S. Patent No. 6,332,654 ("Yano"). Applicant respectfully submits that the combination of Kubota et al. and Yano does not render obvious the present claims for the following reasons.

Claim 1 relates to a method for controlling a wheel brake of a vehicle. Claim 1 recites that the method includes determining a road slope, determining whether a brake pedal is depressed and whether a parking brake is engaged, maintaining a braking force at a wheel independently of an extent of a brake pedal actuation, in at least one operating state with one of the brake pedal depressed and the parking engaged, if the road slope points in a direction of a future travel direction of the vehicle, and reducing the braking force for at least one condition.

Claim 11 relates to a storage medium for storing at least one computer program, wherein the at least one stored computer program is operable for executing in a computing unit a method for controlling a wheel brake of a vehicle. Claim 11 recites that the method includes determining a road slope, determining whether a brake pedal is depressed and whether a parking brake is engaged, maintaining a braking force at a wheel independently of an extent of a brake pedal actuation, in at least one operating state with one of the brake pedal depressed and the parking brake engaged, if the road slope points in a direction of a future travel direction of the vehicle, and reducing the braking force for at least one condition.

Claim 15 relates to a method for controlling a wheel brake of a vehicle. Claim 15 recites that the method includes determining a road slope, determining whether a brake pedal is depressed, and determining whether a parking brake is engaged if it is determined that the brake pedal is not depressed. Claim 15 also recites that the method includes maintaining a braking force at a wheel independently of an extent of a brake pedal actuation, in at least one operating state with one of the brake pedal depressed and the parking brake engaged, if the road slope points in a direction of a future travel direction of the vehicle, and reducing the braking force for at least one condition.

Claim 17 relates to a storage medium for storing at least one computer program, wherein the at least one stored computer program is operable for executing in a computing unit for controlling a wheel brake of a vehicle. Claim 17 recites that the method includes determining a road slope, determining whether a brake pedal is depressed and determining whether a parking brake is engaged if it is determined that the brake pedal is not depressed. Claim 17 also recites that the method includes maintaining a braking force at a wheel independently of an extent of a brake pedal actuation, in at least one operating state with one of the brake pedal depressed and the parking brake engaged, if the road slope points in a

direction of a future travel direction of the vehicle, and reducing the braking force for at least one condition.

The Final Office Action acknowledges at page 4 that Kubota et al. fail to disclose determining whether a brake pedal is depressed and relies upon Yano for allegedly curing the deficiencies of Kubota et al. Specifically, the Final Office Action alleges that "Yano discloses that when it comes to control feedback for hill holding one may interchangeably use brake pedal depression or vehicle speed." Applicant points out, however, that the combination suggested by the Final Office Action does not disclose, or even suggest, either "determining whether a brake pedal is depressed **and** whether a parking brake is engaged" as recited in claims 1 and 11, or "determining whether a parking brake is engaged **if it is determined that the brake pedal is not depressed**" as recited in claims 15 and 17.

Specifically, Kubota et al. only consider braking systems to the extent that the energization signal is only produced if the parking brake is **not** engaged, as noted above. Thus, Kubota et al. teach away from the use of hill holding if either the brake pedal is depressed or the parking brake is engaged. In this regard, Applicant notes that it is improper to combine references where the references teach away from their combination. M.P.E.P. § 2145 (citing In re Grasselli, 713 F.2d 731, 743, 218 U.S.P.Q. 769, 779 (Fed. Cir. 1983)).

In rejecting a claim under 35 U.S.C. § 103(a), the Office bears the initial burden of presenting a prima facie case of obviousness. In re Rijckaert, 9 F.3d 1531, 1532, 28 U.S.P.Q.2d 1955, 1956 (Fed. Cir. 1993). To establish prima facie obviousness, three criteria must be satisfied. First, there must be some suggestion or motivation to modify or combine reference teachings. In re Fine, supra. This teaching or suggestion to make the claimed combination must be found in the prior art and not based on the application disclosure. In re Vaeck, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991). Second, there must be a reasonable expectation of success. In re Merck & Co., Inc., 800 F.2d 1091, 231 U.S.P.Q. 375 (Fed. Cir. 1986). Third, the prior art reference(s) must teach or suggest all of the claim limitations. In re Royka, 490 F.2d 981, 180 U.S.P.Q. 580 (C.C.P.A. 1974). As indicated above, it is respectfully submitted that the combination of Kubota et al. and Yano does not disclose, or even suggest, all of the limitations of claims 1, 11, 15 and 17.

In summary, it is respectfully submitted that the combination of Kubota et al. and Yano does not render unpatentable claims 1, 11, 15 and 17.

As for claims 2 to 4, which ultimately depend from claim 1 and therefore include all of the limitations of claim 1, it is respectfully submitted that the combination of Kubota et al. and Yano does not render unpatentable these dependent claims for at least the same reasons given above in support of the patentability of claim 1. In re Fine, supra (any dependent claim that depends from a non-obvious independent claim is non-obvious).

IV. Conclusion

It is therefore respectfully submitted that all of the presently pending claims are allowable. All issues raised by the Examiner having been addressed, an early and favorable action on the merits is earnestly solicited.

Respectfully submitted,

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Dated: 10/23/03

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